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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,423	01/11/2006	Robert Fifield	GB 030115	8968

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EXAMINER	
AHMED, ENAM	

ART UNIT	PAPER NUMBER
2112	

NOTIFICATION DATE	DELIVERY MODE
04/02/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

Office Action Summary	Application No.	Applicant(s)	
	10/564,423	FIFIELD ET AL.	
	Examiner	Art Unit	
	ENAM AHMED	2112	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 January 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Final Rejection

This office action is in response to applicants amendment of 1/18/08.

The objection to the abstract of the disclosure is withdrawn.

Claims 1-17 are pending in this application.

Response to applicants arguments

The applicants' arguments have been fully considered, but are not found persuasive.

Response to applicants remarks

With respect to claim 1, on page 7, the applicant mentions that the claim recites in part "issuing a NACK signal over the network, by the receiver, in the event that the data packet is not properly received; and retransmitting the data packet onto the network by at least one of the repeater nodes upon receipt of the NACK signal," and that " No such feature is taught or suggested by Szymanski (U.S. Patent No. 6,851,086). " Further the applicant mentions that a repeater (not the original transmitter) receives the NACK signal and performs retransmission, and that Szymanski does not so much as make mention of repeaters.

The Examiner disagrees, and points out that issuing a Nack signal over the network, by the receiver, in the event that the data packet is not properly received and retransmitting the data packet onto the network by at least one of the repeater nodes upon receipt of the NACK signal is anticipated by the **Szymanski** reference. There are several sections in Szymanski which discuss "issuing a Nack signal over the network, by the receiver, in the event that the data packet is not properly received" and retransmission repeat techniques or mechanisms which retransmit packets after receiving a Nack. Thus the **Szymanksi** reference teaches "issuing a NACK signal over the network, by the receiver, in the event that the data packet is not properly received; and retransmitting the data packet onto the network by at least one of the repeater nodes upon receipt of the NACK signal." (column 27, lines 14-19), (column 28, lines 28-30), (column 6, lines 29-67), (column 25, lines 8-22), (column 27, lines

39-51), (column 28, line 53 – column 29, line 12), (column 30, lines 16-28) and (column 36, lines 55-63).

The Examiner also points out that the claim recites one repeater transceiver node implying one repeater transmitter/receiver node. In other words, the repeater is a transmitter which is equivalent to a transmitter as discloed in **Szymanski**

35 U.S.C. 102

Claims 1-17 are rejected under 35 U.S.C. 102(e) as being unpatentable over Szymanski (U.S. Patent No. 6,851,086).

With respect to claim 1, the Szymanski reference teaches transmitting, by the transmitter, a data packet onto multiple paths of a network between the transmitter and the receiver (column 11, lines 14 – 45), (column 35, lines 49-56); at least one of the paths including at least one of the repeater transceiver node (column 36, lines 55-63); issuing a NACK signal over the network, by the receiver (20), in the event that the data packet is not properly received (column 27, lines 14-19); retransmitting the data packet onto the network by at least one of the repeater nodes upon receipt of the NACK signal (column 28, lines 28-30), (column 6, lines 29-67), (column 25, lines 8-22), (column 27, lines 39-51),

(column 28, line 53 – column 29, line 12), (column 30, lines 16-28) and (column 36, lines 55-63).

With respect to claim 2, the Szymanski reference teaches in which the retransmitting step is effected by all repeater nodes that forwarded the data packet and that receive the NACK signal (column 28, lines 20-26), (column 28, lines 28-30).

With respect to claim 3, the Szymanski reference teaches in which the retransmitting step is effected by at least one of the repeater nodes and the transmitter (column 28, lines 20-26), (column 28, lines 33-39).

With respect to claim 4, the Szymanski reference teaches in which the transmitter does not retransmit the original data packet in the event of the issuing of a NACK signal by the receiver (column 26, lines 42-49).

With respect to claim 5, the Szymanski reference teaches in which the transmitter does not listen for NACK signals relating to its own transmitted data packets (column 28, lines 33-39).

With respect to claim 6, the Szymanski reference teaches in which the step of retransmitting the data packet onto the network by the at least one repeater node includes the step of using multiple paths available from the repeater node to the receiver (column 35, lines 47-56), (column 36, lines 25-35).

With respect to claim 7, the Szymanski reference teaches the step of the receiver issuing an ACK signal in the event that the data packet is correctly received, the at least one repeater node forwarding the ACK signal to the transmitter (column 26, lines 34-40).

With respect to claim 8, the Szymanski reference teaches the step of retransmitting the data packet, by the repeater node, after first predetermined retransmittal interval if no ACK or NACK signal is received in respect of a forwarded data packet (column 27, line 65 – column 28, line 8).

With respect to claim 9, the Szymanski reference teaches further including the transmitter retransmitting the data packet step after a second predetermined retransmittal interval if no ACK signal is received, the second predetermined retransmittal interval being greater than the first predeterimined retransmittal interval (column 27, lines 29-34).

With respect to claim 10, the Szymanski reference teaches a receiver module for receiving data packets originating from the transmitter (see Figure 1, Receiver – 14); a transmit module for forwarding the data packet to another node in the network (see Figure 1, Transmitter – 10); a pending packet buffer for storing forwarded data packets (column 6, lines 44-48), (column 28, lines 33-39); retransmission means for retransmitting over the network previously forwarded data packets for which NACK signals are received (column 6, lines 44-48).

With respect to claim 11, the Szymanski reference teaches including purge means for removing a stored data packet from the pending packet buffer when an ACK signal received in respect of that data packet (column 3, lines 61 – 65).

With respect to claim 12, the Szymanski reference teaches in which the retransmission means includes means for retransmitting the data packet over all available paths (column 36, lines 3-9).

With respect to claim 13, the Szymanski reference teaches a repeater node adapted to forward ACK signals to the transmitter but not to forward NACK signals to the transmitter (column 26, lines 43-47).

With respect to claim 14, the Szymanski reference teaches in which the retransmission means includes means for retransmitting the data packet after a first predetermined retransmittal interval when no corresponding ACK or NACK signal is received (column 26, lines 42-49).

With respect to claim 15, the Szymanski reference teaches a receive module in the repeater node for receiving data packets originating from the transmitter (see Figure 1, Receiver – 14); a transmit module for forwarding the data packet to another node in the network (see Figure 1, Transmitter – 10); a pending packet buffer for storing forwarded data packets (column 6, lines 44-48), (column 28, lines 33-39); retransmission means in the repeater node for

retransmitting, over the network, previously forwarded data packets for which NACK signals are received (column 6, lines 44-48).

With respect to claim 16, the Szymanski reference teaches in which the retransmission means, in the repeater node, further includes means for retransmitting the data packet after a first predetermined retransmittal interval when no corresponding ACK or NACK signal is received (column 26, lines 42-49).

With respect to claim 17, the Szymanski reference teaches further including second retransmission means, in the transmitter, for retransmitting the data packet after a second predetermined retransmittal interval longer than the first retransmittal inerval, when no corresponding ACK or NACK signal is received (column 27, lines 29-34).

Conclusion

1. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

.1 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Enam Ahmed whose telephone number is 571-270-1729. The examiner can normally be reached on Mon-Fri from 8:30 A.M. to 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis-Jacques, can be reached on 571-272-6962.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EA

3/19/08

/Guy J Lamarre/

Primary Examiner, Art Unit 2112